

Title (en)  
REVERSIBLE UNIDIRECTIONAL FLOW ROTARY PUMP

Publication  
**EP 0141503 B1 19871014 (EN)**

Application  
**EP 84306011 A 19840903**

Priority  
GB 8324116 A 19830908

Abstract (en)  
[origin: WO8501086A1] A gerotor pump is arranged for unidirectional flow irrespective of direction of rotation of the pump by arranging for displacement of the axis of eccentricity of the annulus and rotor upon drive reversal, the annulus being mounted in a carrier (14, Fig. 1), with freedom for movement in a first direction within the carrier, whilst the carrier itself is pivoted (24) in an outer housing (15), the carrier being free for movement in a second direction within the housing. The effect of normal drive of the rotor is to hold the parts in the Figure 1 position whilst pumping continues, but in the event of drive reversal a pressure fluctuation causes the annulus to be displaced within the carrier and then the carrier to be displaced within the housing so as to bring the parts to substantially the mirror image of the Figure 1 position allowing continued pumping in the same direction from inlet to outlet under reversed drive.

IPC 1-7  
**F04C 15/04**

IPC 8 full level  
**F04C 2/10** (2006.01); **F04C 2/02** (2006.01); **F04C 2/22** (2006.01); **F04C 3/00** (2006.01); **F04C 14/04** (2006.01); **F04C 19/00** (2006.01)

IPC 8 main group level  
**F04C** (2006.01)

CPC (source: EP US)  
**F04C 14/04** (2013.01 - EP US)

Cited by  
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AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
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